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Y.Kimura
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RESPONSE UNDER 37 CFR 1.116
EXPEDITED PROCEDURE
EXAMINING GROUP 2811

PATENT APPLICATION
Do. No. 5484-48

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Byung-Sup SHIM and Young-Ho KIM

Serial No. 09/305,240

Examiner: Nadav, Ori

Filed: May 4, 1999

Group Art Unit: 2811

For: OPEN DRAIN INPUT/OUTPUT STRUCTURE AND MANUFACTURING
METHOD THEREOF IN SEMICONDUCTOR DEVICEBOX AF
Assistant Commissioner for Patents
Washington, D.C. 20231

FAX RECEIVED

MAR 18 2003

AMENDMENT AFTER FINAL REJECTION UNDER 37 CFR 1.116

TECHNOLOGY CENTER 2800

Responsive to the Final Office Action, dated January 3, 2003, please amend the
application as follows.IN THE CLAIMSPlease replace the pending claims with the following set, in which claim 5 has been
amended.5. A pull-up transistor disposed between a Vdd terminal and an I/O pad of a
semiconductor device comprising:

a semiconductor substrate of a first conductivity type;
a source region and a drain region of a second conductivity type formed in the
substrate and defining between them a channel region, one of the source region and the drain
region being electrically coupled to the I/O pad, the other one of the source region and the
drain region being electrically coupled to the Vdd terminal;

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an impurity implantation region of impurities of a second conductivity type formed in
a first sector of the channel region, the first sector not reaching either one of the source region
and the drain region;